

## PMH30

**COST-EFFECTIVENESS OF QUETIAPINE IN COMBINATION WITH LITHIUM OR DIVALPROEX: IN THE MAINTENANCE TREATMENT OF BIPOLAR I DISORDER**Woodward TC<sup>1</sup>, Lazarus A<sup>2</sup>, Quon P<sup>1</sup>, Tafesse E<sup>2</sup>, Fleurence RL<sup>3</sup><sup>1</sup>United BioSource Corporation, Bethesda, MD, USA, <sup>2</sup>AstraZeneca Pharmaceuticals LP, Wilmington, DE, USA, <sup>3</sup>United BioSource Corporation Health Analytics Group, Bethesda, MD, USA

**OBJECTIVE:** Bipolar I disorder (BPD1), is a recurrent illness that affects 1% of the US population (1) and severely impacts both patient and caregiver quality of life. Although BPD1 constitutes a large economic burden, few studies have investigated the cost-effectiveness of maintenance treatment options (2). **METHODS:** The cost-effectiveness of two years of maintenance treatment with quetiapine (QTP) in combination with the traditional mood stabilizers [divalproex (DVP) or lithium (Li)], and placebo (PBO) in combination with Li or DVP, was compared using a Markov model, from a societal perspective. The model simulates a cohort of 1000 stabilized BPD1 patients (i.e., successful remission from prior acute mood episode) and estimates the quarterly risk in three health states: euthymia, mania, and depression. Efficacy data were derived from Studies D1447C00126 and D1447C00127, multicenter, randomized, double-blind, parallel-group trials comparing QTP + Li/DVP with PBO + Li/DVP for up to 2 years. Resource data were obtained from published literature. Drug acquisition costs, hospitalizations, and physician visits were among the direct costs and indirect costs included absenteeism (2). Mortality rates included suicide. Benefits and costs were discounted at 3% and the price reference year was 2007. The major endpoints included costs per episode avoided and costs per quality-adjusted-life-years (QALY). Probabilistic sensitivity analysis was conducted to evaluate uncertainty in the results. **RESULTS:** Treatment with QTP + Li/DVP was associated with reductions in acute mania (45%), acute depression (41%), and related hospitalizations (44%). In the base case analysis, QTP + Li/DVP dominated PBO + Li/DVP. Probabilistic sensitivity analysis showed these results to be robust. **CONCLUSION:** Quetiapine in combination with lithium or divalproex is a cost-effective maintenance treatment for patients with bipolar I disorder.

## PMH31

**A PHARMACOECONOMIC ANALYSIS OF SCHIZOPHRENIC PATIENTS SWITCHING FROM BRANDED TO GENERIC RISPERIDONE INVOLVING A POSSIBLE COMPLIANCE LOSS**Treur MJ<sup>1</sup>, Heeg B<sup>1</sup>, Möller HJ<sup>2</sup>, Schmeding A<sup>3</sup>, Van Hout BA<sup>4</sup><sup>1</sup>Pharmerit Europe, Rotterdam, Zuid-Holland, Netherlands,<sup>2</sup>Psychiatrische Klinik der Ludwig-Maximilians-Universität, München,Germany, <sup>3</sup>Janssen-Cilag GmbH, Neuss, Germany, <sup>4</sup>Pharmerit Europe,

Rotterdam, Netherlands

**OBJECTIVE:** Patients might be reluctant to accept generic substitution, due to differences in colorants, shape, package design, etc. This may result in poorer compliance, especially amongst patients suffering from schizophrenia. Generic substitution for schizophrenic patients decreases drug costs, possibly counteracted by more hospitalizations resulting from poorer compliance. This study quantifies the health-economic impact of generic substitution of oral risperidone in Germany. **METHODS:** An existing five-year discrete event simulation (DES) model was adapted to compare patients staying on branded risperidone (BR) with patients switching to generic risperidone (GR). Differences between treatment arms include compliance and medication costs. The compliance loss for patients subject to generic substitution was varied between 0 and 10%. The generic price was assumed to be 40% of the

branded price (=€7.41). Incremental costs and effects were recorded and analyzed. **RESULTS:** With 2.5%, 5.0%, 7.5% and 10% difference in compliance, incremental effects of BR over GR are 0.003, 0.006, 0.009 and 0.011 QALYs respectively. Incremental costs are €871, €551, €231 and –€195. Health benefits are realized through improved symptom reduction resulting from better compliance. Improved symptom reduction also decreases the number of hospitalizations, counteracting the higher drug costs for BR. On average, each 2.5%-point compliance difference causes a 0.003 QALY gain, while incremental costs decrease with ~€355. Thus, for compliance differences ≥6.5%, the model predicts BR to be cost-effective compared to GR (using NICE threshold of ≤30,000 (–€42,000)). For compliance differences ≥8.5%, the model predicts BR to dominate GR. **CONCLUSION:** The DES model predicts staying on BR may be cost-effective compared to generic substitution if the latter causes a compliance loss ≥6.5%. For a compliance loss ≥8.5%, BR is predicted to dominate GR. Better compliance involves improved symptom reduction resulting in health benefits and fewer hospitalizations. The latter counteracts the higher medication costs associated with BR.

## PMH32

**ACAMPROSATE IN TREATMENT OF ALCOHOL DEPENDENCE—ECONOMIC BENEFITS REVISITED**Erder MH<sup>1</sup>, Weycker D<sup>2</sup>, Oster G<sup>2</sup><sup>1</sup>Forest Research Institute, Jersey City, NJ, USA, <sup>2</sup>Policy Analysis Inc.

(PAI), Brookline, MA, USA

**OBJECTIVE:** Acamprosate has been reported to be cost-effective in maintaining abstinence in alcohol-dependent patients initiating psychosocial rehabilitation. This analysis updates earlier estimates of the economic benefits of such therapy. **METHODS:** Estimated costs (2006 USA dollars) were compared over one year between patients assumed to receive acamprosate as an adjunct to psychosocial rehabilitation versus psychosocial rehabilitation alone. Costs included acamprosate therapy, psychosocial rehabilitation services, and alcohol-related hospitalizations and physician visits. Resource use estimates were obtained from a prospective open-label cohort study. The cost of acamprosate was based on average wholesale price, and an assumed standard 15% discount; all other unit costs were estimated using a large USA health care claims database. **RESULTS:** The estimated cost of acamprosate therapy over one year was \$652 per patient (mean duration of treatment, 180 days). Estimated costs of psychosocial rehabilitation services were similar in the two groups. Estimated costs of alcohol-related hospitalizations and physician visits, however, were \$1059 lower per patient among those assumed to receive acamprosate. Accordingly, the estimated total 1-year cost of alcohol-related care was \$407 lower per patient among those assumed to receive acamprosate plus psychosocial rehabilitation versus psychosocial rehabilitation alone. **CONCLUSION:** Overall costs of alcohol-related care may be substantially lower among alcohol-dependent patients receiving acamprosate plus psychosocial rehabilitation in comparison with psychosocial rehabilitation alone.